

CLAIMS

I claim:

1. A method in a data processing system for automatically initiating the
2 replenishment of a consumable product, comprising:

3 on a first date, fulfilling an order by a consumer for a first instance of the
4 product;

5 based upon the first date, estimating a second date by which the first
6 instance of the product will be fully consumed;

7 before the second date, providing to the consumer an indication that the
8 product should be replenished, the indication including a control usable by the consumer
9 to request replenishment of the product;

10 receiving an indication that the control was used by the consumer to request
11 replenishment of the product; and

12 in response solely to receiving the indication, ordering a second instance of
13 the product to replenish the first instance.

14 2. A method in a data processing system for ordering an item,
15 comprising:

16 on a first date, fulfilling an order by a consumer for a first item;

17 determining a target date for suggesting replenishment of the first item, the
18 target date based upon the first date and the identity of the first item;

19 on the target date, providing to the consumer an indication that the first item
20 should be replenished, the indication including a control usable by the consumer to
21 request replenishment of the first item;

22 receiving an indication that the control was used by the consumer to request
23 replenishment of the first item; and

11 in response solely to receiving the indication, ordering a second item to
12 replenish the first item.

1 3. The method of claim 2 wherein the control is usable by the consumer
2 to request replenishment of the first item by performing a single interaction.

1 4. The method of claim 2 wherein the second item is a physical article.

1 5. The method of claim 2 wherein the second item is a data product.

1 6. The method of claim 2 wherein the second item is a service.

1 7. The method of claim 2 wherein the target date is determined based
2 on an average life span of the first item.

1 8. The method of claim 2 wherein the target date is determined based
2 on an expiration date for the first item.

1 9. The method of claim 2 wherein the target date is determined based
2 on an availability date for the second item.

1 10. The method of claim 2 wherein the target date is determined based
2 on the length of the intervals between the prior purchases.

1 11. The method of claim 2 wherein the consumer has made a plurality of
2 prior purchases of a complement of the first item, and wherein the target date is
3 determined based on the length of the intervals between the prior purchases.

1 12. The method of claim 2 wherein a target date is determined based on
2 the size of the first item.

1 13. The method of claim 2 wherein the target date is determined based
2 on information provided by the consumer.

1 14. The method of claim 2 wherein a target date is determined based on
2 information about the consumer's lifestyle.

1 15. A computer-readable medium whose contents cause a computer
2 system to order an item by:

3 receiving an indication of an order by a consumer for a first item having a
4 first date;

5 determining a target date based upon the identity of the first item; and
6 on the target date, providing to the consumer an indication that the first item
7 should be replenished.

1 16. The computer-readable medium of claim 15 wherein the provided
2 indication includes a control usable by the consumer to request replenishment of the first
3 item, the method further comprising:

4 receiving an indication that the control was used by the consumer to request
5 replenishment of the first item; and

6 in response to receiving the indication, ordering a second item to replenish
7 the first item.

1 17. The computer-readable medium of claim 16 wherein the control is
2 usable by the consumer to request replenishment of the first item by performing a single
3 interaction.

1 18. The computer-readable medium of claim 15 wherein the first date is
2 a date on which the order for the first item was placed.

1 19. The computer-readable medium of claim 15 wherein the first date is
2 a date on which the order for the first item was fulfilled.

1 20. The computer-readable medium of claim 15 wherein the target date
2 is determined based on an average life span of the first item.

1 21. The computer-readable medium of claim 15 wherein the target date
2 is determined based on an expiration date for the first item.

1 22. The computer-readable medium of claim 15 wherein the target date
2 is determined based on an availability date for the second item.

1 23. The computer-readable medium of claim 15 wherein the consumer
2 has made a plurality of prior purchases of the first item, and wherein the target date is
3 determined based on the length of the intervals between the prior purchases.

1 24. The computer-readable medium of claim 15 wherein the consumer
2 has made a plurality of prior purchases of a complement of the first item, and wherein the
3 target date is determined based on the length of the intervals between the prior purchases.

1 25. The computer-readable medium of claim 15 wherein a target date is
2 determined based on the size of the first item.

1 26. The computer-readable medium of claim 15 wherein the target date
2 is determined based on information provided by the consumer.

1 27. A method in a data processing system for assessing item
2 replenishment, comprising:

3 determining that a purchasing entity possesses an item;

4 determining an expiration time for the item, and
5 scheduling for a time preceding the determined expiration time a
6 communication to the purchasing entity indicating that the item should be replenished.

1 28. The method of claim 27, further comprising delivering the
2 communication at the scheduled time.

1 29. The method of claim 28 wherein the delivered communication
2 contains a control for ordering an additional item to replenish the item.

30. The method of claim 29, further comprising:
receiving an indication that the purchasing entity used the control contained
in the delivered communication to order an additional item to replenish the item; and
in response to receiving the indication, ordering an additional item to
replenish the item.

31. A computer-readable medium whose contents cause a data processing system to assess item replenishment by:

- determining that a purchasing entity is using an item;
- determining an expiration time for the item; and
- scheduling for a time preceding the determined expiration time a communication to the purchasing entity indicating that the item should be replenished.

1 32. The computer-readable medium of claim 31, further comprising
2 delivering the communication at the scheduled time.

1 33. The computer-readable medium of claim 32 wherein the delivered
2 communication contains a control for ordering an additional item to replenish the item.

1 34. The computer-readable medium of claim 33, further comprising:
2 receiving an indication that the purchasing entity used the control contained
3 in the delivered communication to order an additional item to replenish the item; and
4 in response to receiving the indication, ordering an additional item to
5 replenish the item.

1 35. A system for automatic item replenishment, comprising:
2 a replenishment targeting subsystem that, for a particular item purchased by
3 a purchaser on a purchased date, determines a target date for replenishment of the item;
4 a replenishment proposal subsystem that transmits to the purchaser in
5 advance of the target date determined for the item by the replenishment targeting
6 subsystem a replenishment proposal to order a replacement for the item; and
7 a replenishment ordering subsystem that orders a replacement for the item
8 responsive to an affirmative response to the replenishment proposal from the purchaser.

1 36. A computer memory containing an item replenishment data
2 structure, the data structure comprising a plurality of entries, each entry comprising an
3 identification of a consumer, an identification of an item, and an indication of a target
4 date on which the replenishment of the item is to be proposed, such that, on a current
5 date, for each entry indicating the current date as its target date, a communication can be
6 transmitted to the consumer identified by the entry proposing the replenishment of the
7 item identified by the entry.

1 37. The computer memory of claim 36 wherein the item replenishment
2 data structure further comprises, for each of a plurality of dates, an indication of the
3 entries indicating the date as their target date.

1 38. A generated data signal conveying a item replenishment data
2 structure, the data structure comprising a plurality of entries, each entry comprising an

3 identification of a consumer, an identification of an item, and an indication of a target
4 date on which the replenishment of the item is to be proposed, such that, on a current
5 date, for an entry indicating the current date as its target date, a communication can be
6 transmitted to the consumer identified by the entry proposing the replenishment of the
7 item identified by the entry.

1 39. A method in a computer system for automatically replenishing an
2 item, comprising

3 determining that a consumer is using an item;

4 determining a target date for replenishing the item; and

5 without intervention by the consumer, placing an order on the consumer's

6 behalf for replenishment of the item within a predetermined tolerance of the target
7 replenishment date.

1 40. The method of claim 39 wherein the consumer has made a plurality

2 of prior purchases of the item, and wherein the target replenishment date is determined
3 based on the length of the intervals between the prior purchases.

1 41. A method in a data processing system for suggesting item

2 replenishment, comprising

3 determining that a purchasing entity is using an item;

4 establishing a condition for suggesting replenishment of the item;

5 testing the condition;

6 when testing indicates that the condition is satisfied, raising an event; and

7 when the event is raised, suggesting replenishment of the item to the
8 purchasing entity.

1 42. The method of claim 41 wherein the established condition is a

2 temporal condition.

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43. The method of claim 41 wherein the established condition is the
2 availability of a replacement item.

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